

Serial No. 09/863,078  
June 8, 2004  
Page 2 of 5

**IN THE CLAIMS:**

Claim 1 (previously presented): A transformer comprising:

a bobbin having first and second tube-shaped members which are coaxial and integral with one another, said first tube-shaped member being located radially within said second tube-shaped member so as to form a gap located therebetween, and said first and second tube-shaped members being integral with and attached to a common base member;

a first winding comprising an air-core coil located in said gap between said first and second tube-shaped members of said bobbin; and

a second winding affixed to said second tube-shaped member of said bobbin.

Claim 2 (previously presented): A transformer according to Claim 1, wherein said air-core coil is not affixed to either said first or second tube-shaped members.

Claim 3 (original): A transformer according to Claim 1, wherein said first winding has a smaller number of turns than said second winding and serves as an input winding which allows a first current associated with a first voltage to flow therethrough, said second winding serving as an output winding which allows a second current associated with a second voltage, higher than said first voltage, to flow therethrough.

Claim 4 (original): A transformer according to one of Claim 3, further comprising a third winding wound on said second tube-shaped.

Claim 5 (currently amended): A transformer according to Claim 4, wherein said third winding serves as a feedback winding ~~which allows a current which is smaller than said second current to flow therethrough.~~

Claim 6 (original): A transformer according to one of Claim 1, further comprising a third winding, separate from said second winding, located on said second tube-shaped member.

Serial No. 09/863,078  
June 8, 2004  
Page 3 of 5

Claim 7 (currently amended): A transformer according to Claim 6, wherein said third winding serves as a feedback winding ~~which allows a current which is smaller than said second current to flow therethrough.~~

Claim 8 (original): A transformer according to claim 1, wherein said first and second tube-shaped members are coupled together by a radially extending base member.

Claim 9 (original): A transformer according to claim 8, further including terminals extending from said radially extending base member.

Claim 10 (currently amended): A transformer according to claim 9, wherein at least two of said terminals are not coupled to said secondary winding.

Claim 11 (previously presented): A transformer comprising:  
a bobbin having first and second axially extending members which are coaxial and integral with one another, said first member being located radially within said second member so as to form a gap therebetween, and said first and second tube-shaped members being integral with and attached to a common base member;  
a first winding comprising an air-core coil located in said gap; and  
a second winding affixed to said second member.

Claim 12 (previously presented): A transformer according to Claim 11, wherein said air-core coil is not affixed to either said first or said second axially extending members.

Claim 13 (original): A transformer according to Claim 11, wherein said first winding has a smaller number of turns than said second winding and serves as an input winding which allows a first current associated with a first voltage to flow th rethrough,

Serial No. 09/863,078  
June 8, 2004  
Page 4 of 5

said second winding serving as an output winding which allows a second current associated with a second voltage, higher than said first voltage, to flow therethrough.

Claim 14 (original): A transformer according to one of Claim 13, further comprising a third winding wound on said second axially extending member.

Claim 15 (currently amended): A transformer according to Claim 14, wherein said third winding serves as a feedback winding ~~which allows a current which is smaller than said second current to flow therethrough.~~

Claim 16 (original): A transformer according to one of Claim 1, further comprising a third winding, separate from said second winding, located on said second axially extending member.

Claim 17 (currently amended): A transformer according to Claim 16, wherein said third winding serves as a feedback winding ~~which allows a current which is smaller than said second current to flow therethrough.~~

Claim 18 (original): A transformer according to claim 1, wherein said first and second axially extending members are coupled together by a radially extending base member.

Claim 19 (original): A transformer according to claim 18, further including terminals extending from said radially extending base member.

Claim 20 (currently amended): A transformer according to claim 19, wherein at least two of said terminals are not coupled to said secondary winding.